

## Allan Gillespie, University of Dundee



I am now Emeritus Professor of Photonics at the University of Dundee, having retired in 2014. I still keep in close contact with the MAPS group at Dundee, which specialises in laser applications to particle accelerators, in addition to a wide range of laser physics and engineering based on surface interactions.

I am therefore probably your oldest lecturer, so in keeping with tradition I attach a mug-shot which is at least 5 years old in the hope that you will not recognise me.

My career has spanned nuclear and accelerator physics, conventional optics, *free-electron lasers* and advanced laser applications for accelerators. I was one of the UK pioneers in free-electron lasers (in 1982) and have been involved with many international projects since then, including at DESY, SLAC, FELIX, J-Lab and CERN.

Since 2011 my group, along with collaborators at STFC Daresbury Laboratory in the UK, has been part of the UK CLIC collaboration at CERN, working on electro-optic techniques to measure the detailed 150fs electron bunch profile of the CLIC main beam. More recently, we have developed a novel laser surface treatment technique (LESS) to mitigate *electron cloud effects* in the LHC at CERN. Tests so far have been extremely encouraging, and may lead to adoption by CERN.